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ABSTRACT

Emotional energy levels of football players from a Division I college (large enrollment) and a Division II college (small enrollment) were assessed. The 20-item State-Trait Anxiety Inventory (STAI) was used to measure varsity football players' emotional energy (anxiety) level. The 25 Division I and 36 Division II athletes were initially tested 96 hours prior to participation in a varsity football contest and retested 24 hours prior to that same contest. Results revealed there was a significant difference between the football players of the two division schools regarding their emotional energy levels. Division I athletes showed a significantly higher emotional energy level on both assessments than did the Division II athletes. It is suggested that STAI test results might be reviewed by the coaching staff and the athlete to ascertain whether the emotional energy level needs to be enhanced ("psyched up") or lowered ("psyched down") before a particular contest in order to achieve the optimum performance level of each athlete. (Author/JD)

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EMOTIONAL ENERGY AMONG COLLEGE FOOTBALL PLAYERS

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Running Head: Athlete's Emotional Energy

SP 024 180

ABSTRACT

The emotional energy levels of football players from two different colleges (Division I, large enrollment; Division II, small enrollment) were assessed in this study. The twenty-item State-Trait Anxiety Inventory (STAI; Form X-1; Spielberger, Gorsuch, and Lushene; 1970) was used to measure varsity football players' emotional energy (anxiety) level perceived by the athletes at the particular time of response. The 25 Division I and 36 Division II athletes were initially tested 96 hours prior to participation in a varsity football contest and retested 24 hours prior to that same contest.

Results of the analysis of variance (ANOVA) revealed there was a significant difference between the football players of the two division schools regarding their emotional energy levels. The Division I (larger school) athletes showed a significantly higher emotional energy level on both assessments than did the Division II (smaller school) athletes.

Cohesiveness between the coaching staff and individual athletes is as crucial to team spirit and success, as is the team spirit among team players. The STAI test results might be reviewed by the coaching staff and the athlete to ascertain whether the emotional energy level needs to be enhanced ("psyched up") or lowered ("psyched down") before a particular contest in order to achieve the optimum performance level of each athlete.

Sport's psychologists (Cratty, 1973a, 1973b; Oxendine, 1968; Singer, 1972; & Klavora, 1974) generally concur that accomplished performances by athletes are related to action requiring varying degrees of emotional energy (anxiety), dependent upon the nature of the task confronting the participants. In the past, researchers have contended that a high level of emotional energy is mandated for optimal performance in gross motor activities such as strength, endurance, and speed, but it is found to be a significant detriment to performance involving complex skills requiring fine muscle movements, coordination, steadiness, and general concentration (Oxendine, 1970).

On the basis of past research it could be assumed that an offensive lineman (gross motor activities) would require a high level of emotional energy, while a place kicker (fine muscle movements) would require a low level of emotional energy to be at optimal performance. An intensive study by Klavora (1974), involving high school football players, failed to substantiate those earlier findings. Klavora (1974) found no significant differences in the football players level of emotional energy at varying positions on the team. The findings of Klavora, however, should not infer that emotional energy is a non-essential element in athletic performance.

"Of all the emotions that relate to performance, by far the most common and misunderstood is anxiety" (Kauss, 1980). Seemingly, this indicates a vast area for investigation with regard to performance in athletics. Athletics have rapidly become a priority in our culture and the need to evaluate emotional energy levels is an area which needs further investigation.

This study investigated the degree of emotional energy occuring in two different college divisions based on enrollment. More specifically, the emotional energy levels of football players between National Association of Intercollegiate Athletics (NAIA) Division I and Division II schools.

METHOD

Participants

The emotional energy levels of football players were studied and all participating individuals were members of a college football team. Football athletes meeting the basic criteria (varsity football players) were randomly selected from a Division I (school enrollment approximately 5800) football team and a Division II (school enrollment approximately 500) football team. The sample included a total of 61 individuals; 25 Division I athletes and 36 Division II athletes.

Procedure

The randomly selected individuals in this study were administered the state form (Form X-1) of the Spielberger, Gorsuch, and Lushene State-Trait Anxiety Inventory (STAI; 1970) which assesses the athletes perceived condition of emotional energy (state anxiety). Individuals were initially tested 96 hours prior to participation in a varsity football contest and retested 24 hours prior to the same contest. Participants received the instrument with instruction to respond as quickly as possible to the 20-item inventory.

Instrument

Emotional energy was measured by the state form (Form X-1) of the Spielberger, et al., State-Trait Anxiety Inventory (STAI; 1970). This inventory utilizes 20 statements pertaining to an individual's anxiety level (emotional energy) at that particular moment. Each item on the inventory receives a score of 1 through 4. The total range of possible scores is from 20 to 80; with a score of 20 indicating a low anxiety level (emotional energy) and a score of 80 representing a high level of anxiety.

RESULTS

Division I and Division II athletes' scores were examined and it was found that the Division I school football players exhibited a higher level of

anxiety with a mean of 44.24 and a standard deviation of 8.21. The Division II school football players showed a lower level of anxiety with a mean of 35.92 and a standard deviation of 7.01.

Insert Table 1 Here

Results of a one-way analysis of variance (ANOVA) indicated there was a significant difference between the football players of the two division schools regarding their STAI (Form X-1) scores. The Division I athletes showed a significantly greater emotional energy level than the Division II athletes, $F(1,120) = 6.90$, $p < .01$. No significant differences were found between the 96 hour and the 24 hour scores for each of the respective schools. The emotional energy level between the two testing periods was consistent for both groups.

Insert Table 2 Here

DISCUSSION

There were many variables which may have had an effect on the findings of this study. For instance, the Division I football players had a higher mean of emotional energy as measured by the STAI at the time they were experiencing a losing season. Conversely, the Division II school football players displayed a lower level of emotional energy while at the time they were experiencing a winning season. Other factors which may or may not affect emotional energy levels are environment (urban versus rural), degree of emphasis placed on athletes by the institution, emotional energy level of the coaching staff and the individual team member's desire to win in a particular game.

Cohesiveness between coaching staff and individual athletes is as crucial to team spirit and success, as is the team spirit among players only. The STAI test results might be reviewed and strategies developed by the coaching staff and the athlete to ascertain whether the emotional energy level needs to be enhanced ("psyched up") or lowered ("psyched down") before a particular contest in order to achieve the optimum performance level of each athlete.

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Table 1

Numbers, Means, and Standard Deviations of the State-Trait Anxiety Inventory (STAI) Scores According to Division I and Division II Schools

Group	Number	Mean	Standard Deviation
Division I	50	44.24	8.21
Division II	72	35.92	7.01

Table 2

ANOVA Summary Table of the State-Trait Anxiety Inventory Scores (STAI) According to Division I and Division II Football Players Responses

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F
Between Groups	1	2044.31	2044.31	36.11
Within Groups	120	6792.63	56.60	
Total	121	8836.94		